

Clayton
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Clayton Urban District Council.



ANNUAL REPORT OF THE MEDICAL OFFICER, *FOR THE YEAR ENDING 1894.*



TO THE CLAYTON URBAN DISTRICT COUNCIL.

MR. CHAIRMAN AND GENTLEMEN,

I have much pleasure in presenting for your consideration my Annual Report for the year ending 31st December, 1894, with the Vital Statistics, and an Account of the Sanitary work accomplished, together with some Sanitary Reforms which it is desirable should be carried out.

POPULATION.—The population, which in 1891, when the census was taken, was 4707 ; I estimate to have reached 4840 by the middle of the year 1894. And when you consider the number of Births over Deaths, the number of new houses erected and occupied, and that employment at the various works in the district has remained about the same, I think you will agree this is not an extravagant estimate.

BIRTHS,—The total number of Births registered during the year, as will be seen on referring to Table B, was 121 ; of which 66 were males, and 55 females. But of these 11 occurred

in the Workhouse of the North Bierley Union, which is situated in your District, so that we had 110 Births in the Urban District, which gives a birth rate equal to 22·7 per 1000. In the previous year it was equal to 23·3 per 1000.

DEATHS.—On referring to Tables A and C, it will be seen that there were 117 Deaths registered during the year ; 62 being males, and 55 females. But of these deaths 56 occurred in the Workhouse, leaving only 61 for the Urban District, which is equal to a death rate of 12·6 per 1000. In the previous year it was equal to 16·6 per 1000.

The distribution according to age of these 61 Deaths as shewn on Table A was as follows : 12 died in infancy, that is to say, before attaining the age of one year. 4 died between 1 and 5 years of age. 4 between 5 and 15 years of age. 7 from 15 to 25 years of age. 15 from 25 to 65 years of age ; and 19 died over 65 years of age. Nearly one-third of the total number died over 65 years of age ; 4 of these ranging from 80 to 85 years of age.

As to the causes of the various deaths, one was from Scarlatina, one from Measles, two from Continued Fever, of ill-defined type, five from Phthisis, thirteen from other affections of the Respiratory Organs, which are better shewn in tabular forms as follows :—

CLASS I.—ZYMOTIC DISEASES.—

Scarlet Fever	...	...	...	1
Continued Fever	...	...	...	2
Measles	...	...	...	1

CLASS II.—CONSTITUTIONAL DISEASES.—

Cancer	...	...	...	1
Phthisis	...	...	...	5
Tubercular Enteritis	...	...	...	1

CLASS III.—LOCAL DISEASES.—

<i>a</i> Nervous System, including Apoplexy				
	Meningitis, Convulsions and Palsy			12
<i>b</i> Vascular System:				
	Heart Diseases	...	...	6
	Syncope	...	...	1
<i>c</i> Respiratory System :				
	Bronchitis	...	...	10
	Pneumonia	...	...	1
	Pulmonary Congestion	...	...	2
<i>d</i> Digestive System :				
	Intestinal obstruction	...	...	1
	Internal cramp	...	...	1
<i>e</i> Urinary System :				
	Bright's Disease	...	...	2

CLASS IV.—DEVELOPMENTAL SYSTEM :

	Defective Development	...	...	5
	Old Age	...	...	9
	Total	...	...	61

The various rates of mortality were as follows :

INFANTILE MORTALITY.—That is deaths of children under one year of age were equal to 109 per 1000 births, in the previous year it was equal to 116.

ZYMOTIC DEATH RATE.—There were 4 deaths from the principal Zymotic diseases, which was equal to a death rate of 0·82 per 1000 of the population. In the previous year it was 1·4.

PHTHISIS DEATH RATE.—The Phthisis death rate was equal to 1·03 per 1000 of population. Last year 1·4.

RESPIRATORY DEATH RATE.—That is deaths from Pneumonia, Bronchitis and Congestion of Lungs, was equal to 2·6 per 1000 of population. In 1893 it was 2·7.

It will be seen that the Death rates from these special causes are, like the general death rate, lower than in 1893. In fact the year 1894 has been a remarkably healthy year, not only in your district, but throughout the kingdom. In your district the death rate has never been so low during the last eleven years of which I have the record. I think, that the upon the whole low temperature of the summer, with frequent heavy rains which kept the sewers well flushed, and the mild open autumn and early winter has been the principal cause of this.

INFECTIOUS DISEASES.

The number of cases of Infectious Diseases reported to me under the Infectious Diseases Notification Act was 59. These again were composed mostly of scarlet fever, of which there were 51. There was also one case of Small Pox, one of Enteric Fever, two of Erysipelas, and four of Diarrhœa.

SCARLET FEVER broke out first on the 5th of February in the Clayton Heights District, and rapidly became epidemic. Most of the cases were children attending the Stocks Lane School. This School we had closed for a fortnight, and well fumigated, and no other cases occurred in that District after the 20th of February. But the disease had by that time spread to the village, and spread rapidly, the first case occurring in the village on Feb. the 12th. The schools in the village were also cleaned and fumigated. The epidemic, after continuing severe until the beginning of April, gradually died out, the last case being notified on the 12th of July. The number of cases in the several months was as follows: in February 17 cases, March 18, April 9, May 4, June 2, and July 1. 43 of the cases occurred during the first two months of the epidemic. Two cases from Clayton Heights, in a rather over-crowded house, were removed to the Thornton Joint Hospital and soon recovered. The other cases were all isolated at home. I find a great difficulty in persuading people to avail themselves of the hospital. No doubt, time will overcome this feeling of dislike which parents

have of allowing their children to go to hospital. But I must confess that, except in cases where there were no means of isolation at home, removing cases to the hospital would not have had any effect in preventing the spread of this epidemic, as it spread so rapidly. It would be a great advantage, if parents would give notice to either myself, or the Sanitary Inspector, in all cases of sickness among their children of a doubtful character, whether it be Scarlatina, Measles or Chicken Pox, for frequently these cases receive no medical attention, especially the earlier cases. I think if parents knew that this step would not entail any expense or hardship upon them, and that it would invariably be of advantage to them, in addition to receiving a supply of disinfectants free of all cost, they would more often do so. And I may here point out that the duty of notifying under the Notification Act, falls upon the parents when they have no Medical Attendant. Out of this large number of cases of Scarlet Fever, I am pleased to say that there was only one death, which occurred in June. This is satisfactory proof of the mildness of the epidemic.

SMALL POX.—The one case notified was on January 12th, No doubt this was contracted in Bradford. He was removed to hospital the same day, and returned home January 30th. The house was fumigated, and quarantine enforced upon other inmates for a fortnight. No other cases occurred.

ENTERIC FEVER.—This case occurred in the Workhouse, and was removed to hospital where he died.

DIARRHŒA was added to the notifiable Infectious Diseases for part of August and September. Four cases were notified, two of these being in the Workhouse.

In the month of October there was an epidemic of Chicken Pox, which attacked large numbers, especially the infants attending the Board School. This was quickly followed by an extensive epidemic of Measles, which did not continue long, and as has been mentioned before, there was only one death recorded from this disease.

INFLUENZA.—Several cases of Influenza occurred during the year, but they were mostly of a mild type, and never assumed epidemic form.

SANITARY WORK.

I regret to say that nothing has been done during the past twelve months to improve the sewerage of the district, nor for the disposal of the sewage. I understand that the Bradford Corporation have agreed to take the sewage, and that it is only matters of detail, which require to be settled. I am pleased if such is the case, for I am convinced that that will be the most efficient and economical means of disposal, and I trust that your Council will push the matter forward as quickly as possible, for as I pointed out last year, there are parts of the district which really have no sewerage, and until you have agreed about the means of disposal, and formulated a definite plan of sewerage, it will be useless attempting to remedy these defects in piecemeal. Also I think it is not wise to allow new Water Closets to be constructed until there is proper sewerage and sewage disposal, and you will see on referring to Table C that there have been 18 constructed during 1894, six being ordinary water closets, and twelve of the so-called 'tipplers.'

Building has proceeded at a brisk rate in your district, and a considerable number of houses have been erected and occupied during the year, and many more are likely to be built soon, and it is necessary that proper sewerage should be provided for them. In my opinion it will be wise, granted that the sewerage is efficient, to encourage them to adopt W.C's in preference to Privy-middens, for then the dejecta &c. is got rid of at once and completely, whereas I believe it will become more and more difficult to get rid of the contents of Privy middens. Here I may mention that from what I have seen of them, I believe the automatic self-flushing, or tippler closets, are the best form of closet to be used for cottage property, for with a little care and the use of disinfectants they can easily be kept clean and sweet.

I think it will be good policy to provide all the advantages you can for new property, for Clayton being within such easy access to Bradford, and having good railway communication, and at the same time being sufficiently far away to be a pleasant change from the busy town, it is likely to grow considerably for residential purposes.

SCAVENGING.—The scavenging has been done by your own Sanitary staff, and upon the whole it has been done very well, certainly much better than it used to be done under the contract system, though I observe the cost has increased considerably since the previous year, which I think is only natural, as there has been so much more work done.

Table C also shows you many useful works done during the year, such as trapping and disconnecting of sinks, of which 15 have been trapped and 30 disconnected. Of 23 nuisances reported during the year 19 were abated.

SLAUGHTER HOUSES.—I have frequently visited the three slaughter houses in the district, and have found them, upon the whole, fairly well kept.

CHOLERA SURVEY.—Owing to the fear which existed of this country being visited with Cholera last year, as I have before mentioned, the late Local Board added Diarrhœa to the diseases for compulsory notification for a short period. In October Dr. Maclean Wilson, an Inspector of the Local Government Board, visited your district, and in company with some members of the late Board, the Sanitary Inspector and myself, made an inspection of the whole of the district, and subsequently met the Board and laid several recommendations before them. They were five in number, as follows :

1. WATER SUPPLY.—So long as water for domestic purposes is obtained from private springs and wells, the Sanitary Authority should exercise the strictest supervision over the

various local sources of water supply. The water from such sources should be examined at frequent intervals, and whenever any signs of pollution are found, a careful search should be made for the source of the pollution, and on its detection, steps should at once be taken to remove it.

2. EXCREMENT AND REFUSE DISPOSAL.—The attention of the Sanitary Authority should be directed to the serious danger to health which is liable to arise from the defective character of many of the privy middens in the district. If fixed receptacles for excrement and refuse are to be retained, they should be reduced to the smallest practicable dimensions, and so constructed as to keep out all unnecessary moisture, and to facilitate the mingling of ashes with excrement.

All privy middens at present causing nuisance should be at once dealt with.

When efficient sewers and an adequate water supply are available, water closets may be used with advantage, particularly in factories and schools and in cases where closets are necessarily placed near dwelling-houses.

3. SEWERAGE AND HOUSE DRAINAGE.—The state of the sewers and house drains demand the immediate attention of the authority. Socketted pipes should be substituted in all cases for old stone culverts, and efficiently trapped earthenware gulleys should be provided in connection with all drains. The thorough ventilation of the sewers, the provision of means for flushing, and the proper disposal of the sewage at the outfall, all require the consideration of the Authority. In these matters they will do well to take the advice of a competent engineer.

4. HOUSES UNFIT FOR HABITATION.—(a) The Sanitary Authority should cause all dwellings, which from dampness, want of ventilation, dilapidation, or other structural defects, are unfit for habitation, to be placed in proper repair or per-

manently closed. (b) The attention of the Authority should be especially given to the danger to health arising from the dampness in foundations and walls due to the absence of proper spouting for the conveyance of rain water from the roofs of houses.

5. **BYE LAWS.**—With a view to securing the more efficient sanitary administration of the district, the Authority should under the advice and with the assistance of their Medical Officer of Health, draw up a code of Bye-laws based on the model series issued by the Local Government Board to replace their present series.

In regard to the first recommendation—Water Supply—there are now few houses that have not Town's water laid on. Of the few wells that are still used, the principal ones are the Town Gate well and the Low well. Under my instructions samples of these waters were taken and submitted to Mr. Alfred H. Allen, of Sheffield, the County Analyst, and the following are copies of his reports upon them.

Report on a sample of Drinking Water received from the Clayton Local Board of Health on December 3rd, 1894.

SAMPLE MARK—LOW WELL.

Physical Characters.—Suspended matter, slight trace.

Appearance of a column two feet long, clear, colourless.

Taste, normal.

Odour, none.

On Analysis, the sample gave the following results.

Grains per gallon.

Total Solid Matter 14·84 ; which lost on Ignition 2·80 grs.

Chlorine 1·30 ; equal to Sodium Chloride 2·13 grs.

Nitrogen in oxidised form 0·31 ; equal to Nitric Acid 1·20 grs.

Poisonous Metals (Lead &c.), none. (anhydrous)

Degrees of Hardness, 11·0.

[Each degree of hardness represents a soap-destroying power equivalent to one grain of chalk per gallon.]

Reducing Power Parts per million.
0·57

[Representing the Oxygen absorbed by the organic and other oxidisable matters in one million parts of water.]

Free and Ureal Ammonia 0·07 parts per million.

Albuminioid Ammonia 0·12 „ „

These results are not wholly satisfactory. They negative any suspicion of extensive contamination by drainage or similar impurity, but the analysis affords indications of the presence of undesirable traces of readily changeable organic matter.

The water must be regarded with some suspicion, but is not sufficiently bad to justify its positive condemnation.

December 17th, 1894.

ALFRED H. ALLEN.

TOWN GATE WELL.

Physical Characters.—Suspended matter, very small amount.

Appearance of a column two feet long, slightly turbid and yellow.

Taste, normal.

Odour, none.

On Analysis the sample gave the following results.

Grains per gallon.

Total Solid Matter 18·48; which lost on Ignition 2·80 grs.

Chlorine 1·30; equal to Sodium Chloride 2·13 grs.

Nitrogen in oxidised form, trace equal to Nitric Acid trace.

Poisonous Metals (Lead, &c.), none. (anhydrous)

Degrees of Hardness 13·0.

(Each degree of hardness represents a soap-destroying power equivalent to one grain of chalk per gallon.)

Reducing Power Parts per million.
1·11

(Representing the Oxygen absorbed by the organic and other oxidisable matters in one million parts of water.)

Free and Ureal Ammonia 0·16 parts per million.

Albuminoid Ammonia 0·12 „ „

These results negative any suspicion of *extensive* contamination by drainage or similar impurity, but the analysis affords indications of the presence of undesirable traces of readily changeable organic matter.

The water, which would be materially improved by filtration, must be regarded with some suspicion, but is not sufficiently bad to justify its positive condemnation.

December 17th, 1894.

ALFRED H. ALLEN.

These results are fairly satisfactory, and I ordered the wells to be cleaned out, which I believe will remove what traces of impurity existed. At the same time I would advise your Council to press upon owners of property not already having Town's water laid on, the advisability of having it done at once.

In regard to the second recommendation, Excrement and Refuse Disposal, your Council have issued orders to have several faulty privy middens put into proper sanitary repair, and you are about to adopt bye-laws regulating the size and proper construction of others.

The third recommendation, Sewerage and House Drainage I have before referred to.

The fourth recommendation, Houses unfit for habitation, There are very few in your district, and they are dealt with from time to time as they come before your notice.

The fifth recommendation, Bye-laws, Your Council have appointed a sub-committee to form new bye-laws on the basis of the model bye-laws of the Local Government Board.

This sub-committee has already met, and drawn up a series of bye-laws which will be submitted for approval and adoption, and which will, I believe, give satisfaction.

I append tables A, B and C duly filled up.

I have the honour to be, Gentlemen,

Your obedient servant,

A. E. TUNSTALL,

L.R.C.P. & L.R.C.S., Ed.

Medical Officer of Health.

Harrop House, Thornton.

March 1st, 1895.